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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/797,791	03/10/2004	Thomas Duerbaum	DE 010138A	4510
24737	7590	12/15/2006	EXAMINER	
PHILIPS INTELLECTUAL PROPERTY & STANDARDS P.O. BOX 3001 BRIARCLIFF MANOR, NY 10510			PATEL, RAJNIKANT B	
			ART UNIT	PAPER NUMBER
			2838	

DATE MAILED: 12/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/797,791

Applicant(s)

DUERBAUM ET AL.

Examiner

Rajnikant B. Patel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 3 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 5,9,11-13,15-18 and 23-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 5,9,11-13,15-18 and 23-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments with respect to claims 5,9,11-13,15-18 and 23-33 have been considered but are moot in view of the new ground(s) of rejection. Further in view of newly found reference previously allowable subject matters are withdrawn. A new office action with further clarifications as requested by applicant.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 9,16 rejected under 35 U.S.C. 102(b) as being anticipated by Liu et al. (U.S. Patent # 5,363,287).

Liu et al. disclose the claimed subject matters a resonant converter (figure 1), including a multiple output (figure 1, item –12V, +12V, +5V), a transformer with a primary winding (figure 1, item 12), and at least two secondary windings (figure 1, item T1 with three different windings) and the different winding direction and different ratio are at the top transformer and middle transformer, since the conventional “.” Represent the different

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winding direction (one dot at bottom of coil, the other "." at top). The different ratio of output voltage (12, -12) to number of turns (turns are same for both (n), since voltage magnitude is the same (12)) is different since one ratio positive (12/n), the other is negative (-12/n).

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 5-13 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cathell et al. (U.S. Patent # 5,121,314) in combination with Rozman, Allen Frank (EP 0602835A1).

Cathell et al. disclose the claimed subject matters a resonant converter (1,5 and 6A-B), including a transformer with a primary winding and at least two secondary windings a capacitive element (figure 1, item Cs), at least one external inductive element (figure 1, item Ls1) and the resonant frequency (column 2, line 30-40). However Cathell et al. does not disclose the utilization of the technique for at least two of the secondary windings of different winding direction, multiple outputs and at least two of the windings being electrically explicatively separated from one another. Rozman teaches the utilization of the similar technique for at least two of the secondary windings of different

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winding direction (figure 3, item 20 and 21), multiple outputs (figure 3, item VOUT1-2....N2) and at least two of the secondary windings being electrically explicatively separated from one another (figure 3, item 20-21). It would have been obvious one having ordinary skill in the art at the time the invention was made to modify Cathell et al.'s resonant power supply by utilizing the technique taught by Rozaman, Allen Frank for the purpose providing an improved power supply with number of different voltage output to number of different loads.

3. Claims 11-12 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cathell et al. (U.S. Patent # 5,121,314) in combination with Rozman, Allen Frank (EP 0602835A1) and further in combination with Steigerwald et al. (U.S. Patent # 4,695,934).

Cathell et al. in combination with Rozman, Allen disclose the claimed subject matters as explained in the claims 5 and 13, above, except the utilization of the technique for the multiple outputs a measuring signal for regulating an output voltage of the inverter. Steigerwald et al. teaches the utilization of the similar technique for the multiple outputs a measuring signal for regulating an output voltage of the inverter (column 3, line 55-65). It would have been obvious one having an ordinary skill in the art at the time the invention was made to modify Cathell et al. in combination with Rozman, Allen Frank's power supply by utilizing the technique taught by Stegerwald et al. for the purpose of increasing the efficiency of the power supply.

4. Claims 17-18,25,26 and 31-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cathell et al. (U.S. Patent # 5,121,314) in combination with Rozman,

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Allen Frank (EP 0602835A1) and further in combination with Steigerwald et al. (U.S. Patent # 4,695,934) and Eng (U.S. Patent # 4,623,960).

Cathell et al. in combination with Rozman Allen Frank and further in combination with Steigerwald disclose the claimed subject matters as explained in the claims 5 and 11-13, above, except the utilization of the technique for at least two of the secondary winding electrically connected one another and secondary windings are connected to a ground potential. Eng teaches the utilization of the technique for at least two of the secondary winding electrically connected one another and secondary windings are connected to a ground potential (figure 1, item 140, 111, 112 and a conventional symbol of ground). It would have been obvious one having an ordinary skill in the art at the time the invention was made to modify Cathell et al. in combination with Rozman, Allen Frank's power supply by utilizing the technique taught by Eng for the purpose of a voltage level responsive hysteresis control and for protection of circuit.

### ***Double Patenting***

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).


Claims 5,8-9,11-13,15-18 and 21-26 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-19 of U.S. Patent No. 6,721,191. Although the conflicting claims are not identical, they are not patentably distinct from each other because Both the sets of claims directed toward a resonant converter comprising: multiple converter outputs, including a transformer having a primary winding and at least two secondary windings wherein the resonant frequency of the resonant converter determined by the main inductance and a leakage inductance of the transformer and by a capacitive element.

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rajnikant B. Patel whose telephone number is 571-272-2082. The examiner can normally be reached on 6.30-5.00; m-f.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Karl Easthom can be reached on 571-272-1989. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Rajnikant B Patel  
Primary Examiner  
Art Unit 2838

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